Three-phase fuel deposition in a long-distance migrant, the Red Knot (Calidris canutus piersmai), before the flight to high Arctic breeding grounds

Hua, Ning; Piersma, Theunis; Ma, Zhijun

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Table S3. Regression analyses of the relationship between body components (Y) and body mass (X) of *piersmai* red knots.

	Regression equation			ANOVA			
Body component	Intercept	Body mass (g) at breakpoint	Slope	F	*p*	R^2	N
Fat mass (g)	–25.63 ($p = 0.011$)	$X_1 = 138$ ($p < 0.001$)	$K_1 = 0.34$ (for $X \leq 138$, $p < 0.001$)	281.30	< 0.001	0.98	32
		$X_2 = 175$ ($p < 0.001$)	$K_2 = 1.34$ (for $138 < X \leq 175$, $p < 0.001$)				
			$K_3 = 0.40$ (for $X > 175$, $p < 0.001$)				
Total LDM (g)	5.68 ($p = 0.06$)	$X_1 = 132$ ($p < 0.001$)	$K_1 = 0.17$ (for $X \leq 132$, $p < 0.001$)	43.60	< 0.001	0.89	32
		$X_2 = 176$ ($p < 0.001$)	$K_2 = –0.045$ (for $132 < X \leq 176$, $p = 0.10$)				
			$K_3 = 0.16$ (for $X > 176$, $p < 0.001$)				
Flight muscle LDM (g)	2.25 ($p < 0.001$)	$X_1 = 134$ ($p < 0.001$)	$K_1 = 0.036$ (for $X \leq 134$, $p < 0.001$)	63.21	< 0.001	0.92	32
		$X_2 = 174$ ($p < 0.001$)	$K_2 = 0.0010$ (for $134 < X \leq 174$, $p = 0.93$)				
			$K_3 = 0.053$ (for $X > 174$, $p < 0.001$)				
Gizzard LDM (g)	0.059 ($p = 0.84$)	$X_1 = 141$ ($p < 0.001$)	$K_1 = 0.011$ (for $X \leq 141$, $p < 0.001$)	7.62	< 0.001	0.59	32
		$X_2 = 198$ ($p < 0.001$)	$K_2 = –0.0088$ (for $141 < X \leq 198$, $p = 0.005$)				
			$K_3 = 0.028$ (for $X > 198$, $p =0.007$)				
Standardized LDM of other nutrient organs	–9.67 ($p < 0.001$)	$X_1 = 141$ ($p < 0.001$)	$K_1 = 0.079$ (for $X \leq 146$, $p < 0.001$)	5.55	0.001	0.52	32
		$X_2 = 175$ ($p < 6.001$)	$K_2 = –0.083$ (for $141 < X \leq 175$, $p < 0.001$)				
			$K_3 = 0.031$ (for $X > 175$, $p < 0.001$)				
Leg muscle LDM (g)	0.68 ($p < 0.001$)	NA	$K = 0.0035$ ($p < 0.001$)	47.88	< 0.001	0.61	32

The regression models were selected according to AIC_c in Table S1. The piecewise regression equations and breakpoints for each equation were calculated through the *Nonlinear Regression Analysis Program* (Advanced GUI version).